Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

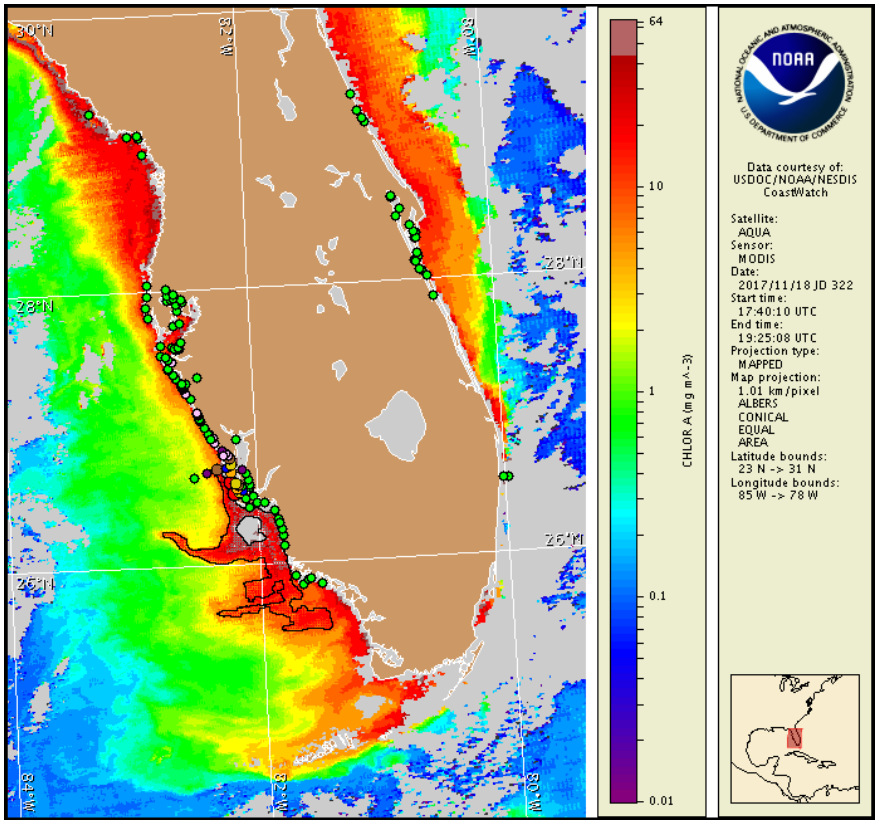
Monday, 20 November 2017

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, November 16, 2017



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from November 10 to 16: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Florida Fish and Wildlife Conservation Commission (FWC) Fish and Wildlife Research Institute. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

https://tidesandcurrents.noaa.gov/hab/hab_publication/GOMX_HAB_Bulletin_Guide.pdf

Detailed sample information can be obtained through FWC Fish and Wildlife Research Institute at:

http://myfwc.com/redtidestatus

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at: https://tidesandcurrents.noaa.gov/hab/gomx.html

Conditions Report

Not present to high concentrations of *Karenia brevis* (commonly known as Florida red tide) are present along- and offshore portions of southwest Florida, and not present in the Florida Keys. *K. brevis* concentrations are patchy in nature and levels of respiratory irritation will vary locally based upon nearby bloom concentrations, ocean currents, and wind speed and direction. The highest level of potential respiratory irritation forecast for Monday, November 20 through Wednesday, November 22 is listed below:

County Region: Forecast (Duration)
Southern Charlotte, bay regions: Low (M-W)
Northern Lee: Very Low (M-W)
Northern Lee, bay regions: Moderate (M-W)
Central Lee: Low (M), Moderate (T-W)
Central Lee, bay regions: Moderate (M-W)
All Other SWFL County Regions: None expected (M-W)

Health information, from the Florida Department of Health and other agencies, is available at https://tidesandcurrents.noaa.gov/hab/gomx_health.html. For recent, local observations and data check Mote Marine Laboratory Daily Beach Conditions (http://visitbeaches.org/) and the Florida Fish and Wildlife Conservation Commission Red Tide Status (http://myfwc.com/redtidestatus). There have been no reports of respiratory irritation or dead fish.

Analysis

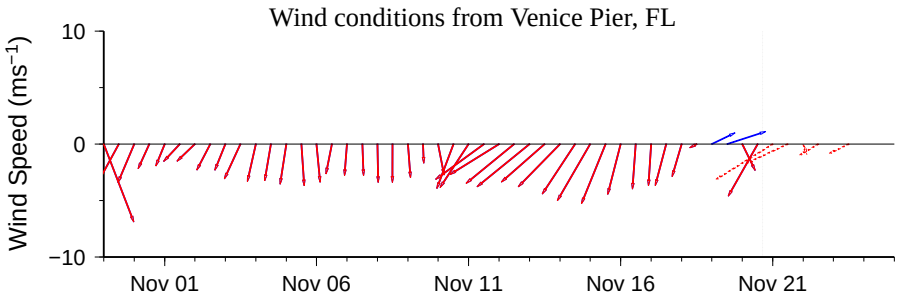
Due to the upcoming federal holiday, the next bulletin will be issued on Wednesday, November 22.

Recent samples collected alongshore southwest Florida continue to indicate *Karenia brevis* ranges from not present to 'high' concentrations from Pinellas to Collier counties, with the highest concentrations present in bay regions of northern and central Lee County (FWRI, MML, SCHD, CCPCD; 11/10-11/16). Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: http://myfwc.com/redtidestatus.

Recent ensemble imagery (MODIS Aqua, 11/18) shows elevated to very high chlorophyll (2 to >20 μg/L) along- and offshore southwest Florida. A patch of elevated to high chlorophyll matching the optical characteristics of *K. brevis* is visible alongshore Lee to Collier counties, and extends up to 65 miles offshore from southern Lee County.

Winds forecasted through Wednesday continue to be upwelling favorable, decreasing the potential for bloom intensification at the coast.

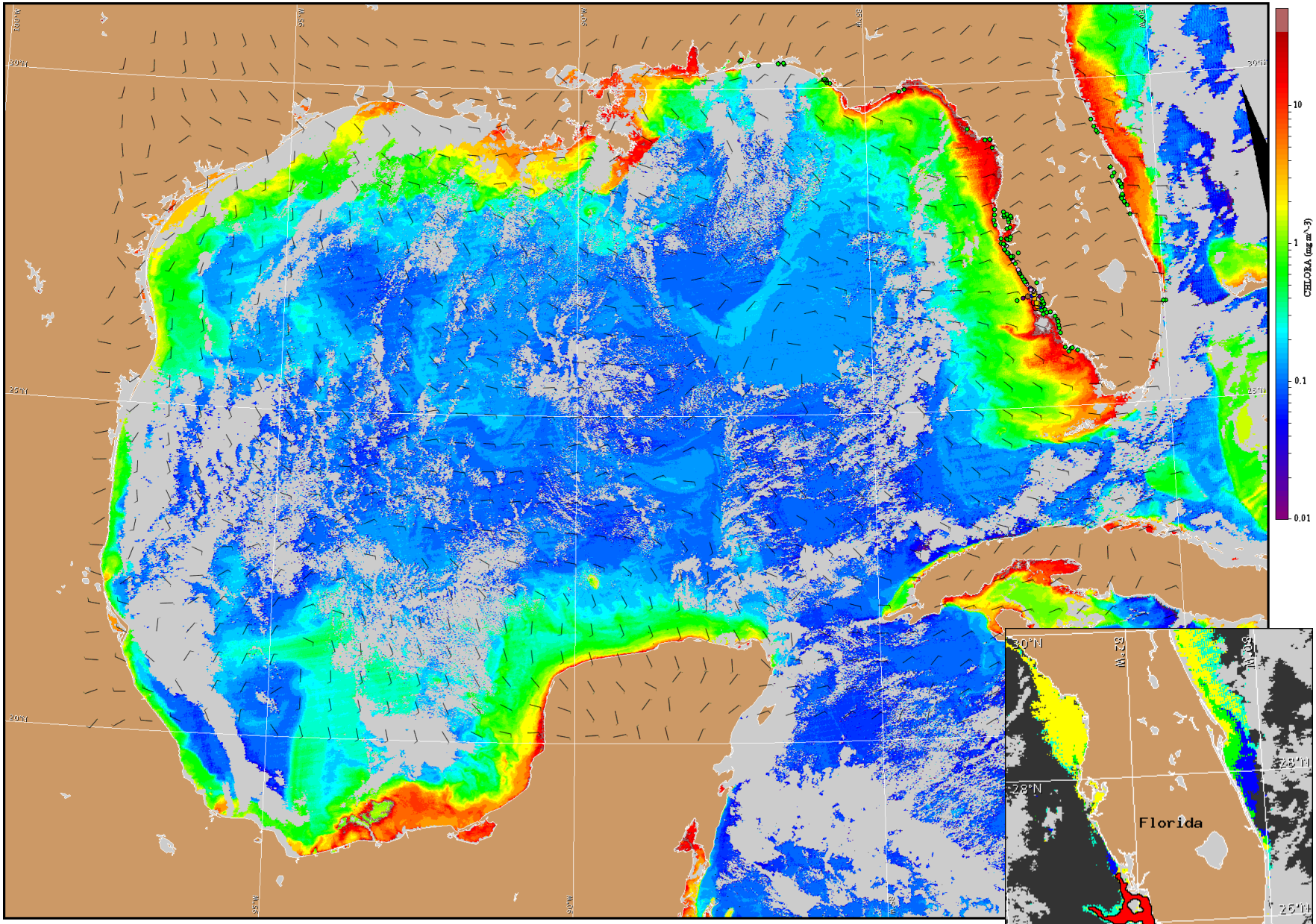
Keeney, Ludema



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

Wind Analysis

Englewood to Tarpon Springs (Venice): East winds (10-15kn, 5-7m/s) today. East winds Tuesday (15kn, 8m/s) becoming southeast winds (5-10kn, 3-5m/s) Tuesday afternoon. East winds (5kn, 3m/s) Tuesday night. North to northeast winds (5-10kn, 3-5m/s) Wednesday.



Satellite chlorophyll image and forecast winds for November 21, 2017 12Z with points representing cell concentration sampling data from November 10 to 16: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Florida Fish and Wildlife Conservation Commission (FWC) Fish and Wildlife Research Institute. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

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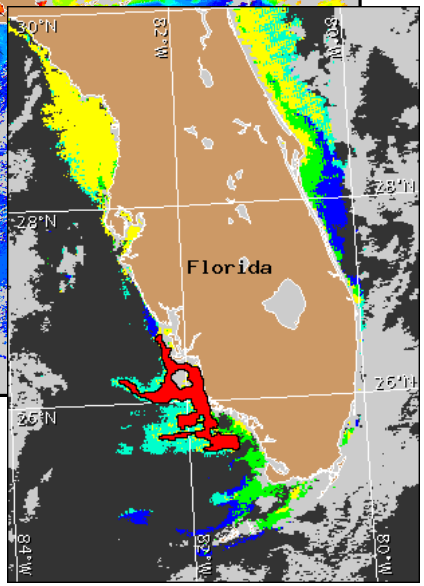

Verified and suspected HAB areas shown in red. Other areas with *K. brevis* optical characteristics shown in yellow (see p. 1 analysis for interpretation).